## **LISTING OF THE CLAIMS**

This listing of claims will replace all prior versions, and listings, of claims in the application:

- 1. (Currently Amended) A method for evaluating the dynamic biological state of a patient, said method <u>comprising</u>, <u>which involves</u> measuring several elements or substances present in blood and interpreting results of performed measures, comprising the following steps:
- (1°) providing the blood previous by previously taken from a patient;
- (2°) determining in vitro, from said blood, hematic substances as metabolic and/or tissular parameters:
  - number of red blood cells (GR),
  - number of leukocytes (GB),
  - hemoglobin (HG),
  - number of neutrophils,
  - number of eosinophils,
  - number of lymphocytes,
  - number of monocytes,
  - number of platelets,
  - lactate dehydrogenase (LDH),
  - creatine phosphokinase (CPK),
  - thyroid-stimulating hormone (TSH),
  - alkaline phosphatases,
  - liver (H1 and H2), bone (O1) and/or intestine (I1, I2 and I3) isoenzymes,
  - osteocalcin,
- potassium and calcium, and

optionally, at least one of the following substances:

- carcinoembryonic antigen (CEA),
- one or several CA15-3, CA125 and CA19-9 markers,
- acid phosphatases, in particular prostatic acid phosphatase (PAP),
- prostate specific antigen (PSA),
- hourly sedimentation rate (ESR<sub>1</sub>),
- bihourly sedimentation rate (ESR<sub>2</sub>),

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- thyroid hormones, in particular triiodothyronine (FT3) and thyroxine (FT4),
- g-glutamyl transpeptidases,
- transaminases,
- chlorides and sodium, and
- adrenocorticotropic hormone (ACTH);
- (3°) measuring, from step (2°), at least one index selected from the group consisting of following indexes J1-J157:
- J1 the a so-called genital ratio index, which is the a ratio red blood cells/leukocytes,
- J2 the a so-called genital-thyroid ratio index, which is the a ratio neutrophils/lymphocytes,
- J3 the <u>a</u> so-called adaptation index, which is the <u>a</u> ratio eosinophils/monocytes, J3 being such that J3 = eosinophils/monocytes = ACTH/FSH,
- J4 the a so-called thyroid index, which is the a ratio LDH/CPK,
- J5 the a so-called estrogenic index, which is the a ratio TSH/osteocalcin,
- J6 the <u>a</u> so-called growth index, which is the <u>a</u> ratio bone isoenzymes of the alkaline phosphatases/osteocalcin, (O1/osteocalcin),
- J7 the a so-called turnover index, which is the a product TSH x O1
- J8 the <u>a</u> so-called fibrosis index, J8 being defined by the <u>a</u> relation  $J8 = (TSH)^2(\text{osteocalcin})^3/100$ ,
- J9 the <u>a</u> so-called index of thyroid involvement, which is the <u>a</u> ratio CA15-3/CEA,
- J10 the a so-called index of follicular involvement, which is the a ratio CA125/CEA,
- J11 the <u>a</u> so-called index of metabolic-hypothalamic involvement, which is the a ratio CA19-9/CEA,
- J12 the a so-called pancreatic index, which is the a ratio PAP/PSA,
- J13 the <u>a</u> so-called global TRH index of adaptation, which is the <u>a</u> ratio CA19-9/TSH,
- J14 the <u>a</u> so-called index of leukocytes mobilization, J14 being defined by the <u>a</u> relation J14 = (platelets x neutrophils x HG)/(30 x leukocytes),
- J15 the <u>a</u> so-called index of platelets mobilization, J15 being defined by the <u>a</u> relation J15 = platelets/ $(60 \times 10^{-5})$  relation J15 =  $(60 \times 10^{-5})$

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- J16 the <u>a</u> so-called index of thyroid reactivating activity, which is the <u>a</u> ratio monocytes/lymphocytes,
- J17 the <u>a</u> so-called structure/function ratio index, J17 being defined by the <u>a</u> relation J17 = (neutrophils+basophils+monocytes)/(eosinophils  $[[x]] \pm \text{lymphocytes}$ ),
- J18 the <u>a</u> so-called index of estrogenic fraction #1, which is the <u>a</u> ratio lymphocytes/osteocalcin,
- J19 the a so-called index of estrogenic fraction #2, which is the a ratio neutrophils/monocytes,
- J20 the <u>a</u> so-called index of metabolic estrogenic fraction, which is the <u>a</u> ratio LDH/osteocalcin,
- J21 the <u>a</u> so-called index of thyroid mobilization of bone metabolism, which is the <u>a</u> ratio LDH/bone isoenzymes fraction of the alkaline phosphatases,
- J22 the <u>a</u> so-called index of thyroid mobilization of bone endocrine metabolism, which is the <u>a</u> ratio TSH/bone isoenzymes fraction of the alkaline phosphatases,
- J23 the <u>a</u> so-called index of relative osteomuscular metabolic activity, which is the <u>a</u> ratio CPK/bone isoenzymes fraction of the alkaline phosphatases,
- J24 the <u>a</u> so-called index of thyroid bone metabolic activity, which is the <u>a</u> ratio CPK/osteocalcin,
- J25 the a so-called catabolism/anabolism ratio index, J25 being the a ratio J2/J1,
- J26 the a so-called index of circulating cortisol, J26 being the a ratio J25/J3,
- J27 the a so-called androgenic index, J27 being the a ratio J1/J3,
- J28 the a so-called adrenal cortex index, J28 being the a ratio J26/J27,
- J29 the a so-called index of adrenal cortex permissiveness, J29 being the a ratio J1/J27 1/J27,
- J30 the a so-called index of aromatization of estrogens, J30 being the a ratio J29/J1,
- J31 the a so-called level of catabolism, J31 being the a ratio J4/J28,
- J32 the a so-called level of anabolism, J32 being the a ratio J31/J25,
- J33 the <u>a</u> so-called level of metabolic activity efficiency, J33 being defined by the <u>a</u> relation  $J33 = (J32+J31) \times 100/2.25$ ,
- J34 the a so-called index of bone remodeling, which is the a product TSH x J6,
- J35 the a so-called index of nuclear membrane activity, J35 being the a ratio J5/J6,
- J36 the a so-called adjusted growth index, J36 being the a ratio J6/J7,
- J37 the a so-called anti-growth index, J37 being the a ratio 1/J36,

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- J38 the a so-called somatostatin index, J38 being the a ratio J37/J26,
- J39 the <u>a</u> so-called prolactin index, J39 being defined by the <u>a</u> relation  $J39 = (J38/J6) \times TSH$ ,
- J40 the <u>a</u> so-called level of membrane expansion, J40 being the <u>a</u> product J31 x J36,
- J41 the <u>a</u> so-called level of structural expansion, J41 being the <u>a</u> product J32 x J35,
- J42 the a so-called apoptosis index, J42 being the a ratio J41/J40,
- J43 the a so-called adjusted apoptosis index, J43 being the a ratio J42/J35,
- J44 the <u>a</u> so-called level of membrane fracture, J44 being defined by the <u>a</u> relation J44 =  $J33/(TSH \times J7)$ ,
- J45 the a so-called necrosis index, J45 being the a ratio J44/J42,
- J46 the  $\underline{a}$  so-called level of activity of total androgens, J46 being the  $\underline{a}$  product J5 x J1
- J47 the <u>a</u> so-called rate of adrenal cortex androgens, J47 being defined by the <u>a</u> relation J47 =  $\frac{1}{46}/(1 + J27)$ ,
- J48 the <u>a</u> so-called rate of genital androgens, J48 being defined by the <u>a</u> relation J48 = (J46 J47),
- J49 the <u>a</u> so-called progesterone index, J49 being defined by the <u>a</u> relation  $J49 = J5/(J48 \times J3)$ ,
- J50 the <u>a</u> so-called level of activity of genital estrogens, J50 being defined by the <u>a</u> relation J50 = J5/(1 + J30),
- J51 the <u>a</u> so-called rate of aromatized estrogens, J51 being defined by the <u>a</u> relation J51 = J5 J50,
- J52 the a so-called adrenal cortex index, which is the a ratio J25/J1,
- J53 the <u>a</u> so-called folliculin index, J53 being defined by the <u>a</u> relation  $J53 = 20 \times (J5/J49)$ ,
- J54 the <u>a</u> so-called insulin index, J54 being defined by the <u>a</u> relation  $J54 = (100 \times J25)/(J7 \times TSH)$ ,
- J55 the <u>a</u> so-called demyelinization index, J55 being defined by the <u>a</u> relation  $J55 = J54/(J36 \times J6)$ ,

- J56 the <u>a</u> so-called index of DNA fracture, J56 being defined by the <u>a</u> relation  $J56 = (100 \times J5 \times J4 \times J41)/(J7 \times J35 \times J42 \times J45)$ ,
- J57 the <u>a</u> so-called index of nucleocytoplasmic pathogenicity, J57 being defined by the <u>a</u> relation J57 =  $(1.7 \times J56)/J44$ ,
- J58 the <u>a</u> so-called index of cellular fracture, J58 being defined by the <u>a</u> relation J58 = 2.5 x J44 x J56/J45,
- J59 the a so-called index of carcinogenesis, J59 is the a ratio J57/J42,
- J60 the <u>a</u> so-called index of comparative carcinogenesis, J60 being defined by the <u>a</u> relation J60 = (10 x J58)/J43,
- J61 the <u>a</u> so-called index of active cellular permeability, J61 being defined by the <u>a</u> relation  $J61 = J6 \times J34/J54$ ,
- J62 the <u>a</u> so-called index of adjusted active cellular permeability, J62 being defined by the <u>a</u> relation J62 =  $(J61 \times J29)/J26$ ,
- J63 the <u>a</u> so-called index of passive cellular permeability, J63 being defined by the <u>a</u> relation  $J63 = J45 \times J35 \times J68 \times 10$  (wherein J68 is defined as indicated below),
- J64 the <u>a</u> so-called index of active intracellular osmolar gradient, J64 being defined by the <u>a</u> relation J64 =  $100 \times J54 \times J40 \times J35/J3$ ,
- J65 the <u>a</u> so-called index of adjusted active intracellular osmolar gradient, J65 being defined by the a relation J65 =  $(J64 \times J29)/J26$ ,
- J66 the <u>a</u> so-called index of passive intracellular osmolar gradient, J66 being defined by the <u>a</u> relation J66 =  $(10 \times J43 \times J53)/(J45 \times J8)$ ,
- J67 the <u>a</u> so-called oxidation-reduction index, J67 being defined by the <u>a</u> relation J67 = (100 x) J45 x J40 x J41 x J54)/(J71 x J8 x J38), (wherein J71 is defined as indicated below),
- J68 the <u>a</u> so-called index of corticoadrenal adaptation/permissiveness, J68 being defined by the <u>a</u> relation J68 = J26 J29 J28,
- J69 the a so-called adaptogenic index which is the a ratio K/Ca,
- J70 the <u>a</u> so-called bMSH/aMSH index, (differential melanocyte-stimulating hormones), J70 being the <u>a</u> ratio J4/J69,

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- J71 the <u>a</u> so-called apoptosis bis index, J71 being defined by the <u>a</u> relation  $J71 = J35/(J36 \times J25)$ ,
- J72 the <u>a</u> so-called amylosis index, J72 being defined by the <u>a</u> relation  $J72 = (J38 \times J53 \times J55 \times TSH)/(J4 \times J5 \times J54)$ ,
- J73 the a so-called index of amylosis risk, J73 being the a ratio J8/J67,
- J74 the a so-called index of insulin resistance, J74 being the a ratio J38/J54,
- J75 the a so-called upstream index #1, J75 being the a ratio J4/J9,
- J76 the a so-called upstream index #2, J76 being the a ratio J4/J10,
- J77 the a so-called upstream index #3, J77 being the a ratio J4/J11,
- J78 the a so-called global upstream index #1, J78 being the a ratio J75/J76,
- J79 the a so-called global upstream index #2, J79 being the a ratio J75/J77,
- J80 the a so-called global upstream index #3, J80 being the a ratio J76/J77,
- J81 the a so-called index of thyroid output #1, J81 being the a ratio J4/TSH,
- J82 the a so-called index of free radicals, J82 being the a ratio J67/J54,
- J83 the <u>a</u> so-called adjusted index of free radicals, J83 being defined by the <u>a</u> relation J83 = (J67 + J64)/(J54 + J74),
- J84 the <u>a</u> so-called comparative index of free radicals, J84 being defined by the <u>a</u> relation J84 =  $(J67 + (100 \times J40))/(J54 + J74)$ ,
- J85 the <u>a</u> so-called index of free radical nocivity, J85 being defined by the <u>a</u> relation J85 =  $((J82 + J83 + J84) \times J56)/(3 \times J71)$ ,
- J86 the a so-called adjusted apoptosis index (B), J86 being the a ratio J71/J35,
- J87 the <u>a</u> so-called index of active histamine, J87 being defined by the <u>a</u> relation J87 =  $(eosinophils \times platelets \times J3)/J52$ ,
- J88 the <u>a</u> so-called index of potential histamine, J88 being defined by the <u>a</u> relation J88 = (J87 x J63)/(potassium x J70)
- J89 the a so-called TRH index, which is the a ratio TSH/FT4,
- J90 the a so-called index of relative intrathyroid TRH activity, which is the a ratio FT3/FT4,
- J91 the a so-called index of carcinogenic expansion, J91 being the a ratio J60/J59,
- J92 the <u>a</u> so-called index of cancer potential, J92 being the product  $J91 \times J54 \times J85$ ,
- J93 the a so-called adenosis index, J93 being the a ratio J8/J91,

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- J94 the <u>a</u> so-called ischemia reperfusion index, J94 being defined by the <u>a</u> relation J94 = 10 x J34 x J43/J33,
- J95 the <u>a</u> so-called thrombogenic index, J95 being defined by the <u>a</u> relation  $J95 = 10 \times J34 \times J42 \times J45/J33$ ,
- J96 the <u>a</u> so-called thrombotic index, J96 being defined by the <u>a</u> relation  $J96 = J95 \times J87 \times J1/10$ ,
- J97 the <u>a</u> so-called adjusted genital ratio index, J97 being defined by the <u>a</u> relation J97 = (J14 x Red cells)/(Leukocytes x J15) = J14 x J1/J15,
- J98 the <u>a</u> so-called musculotropic index, J98 being defined by the <u>a</u> relation  $J98 = J97 \times (CPK/O1)$ ,
- J99 the <u>a</u> so-called adjusted estrogenic index, J99 being defined by the <u>a</u> relation J99 = (J5 x (osteocalcin + 1)/(osteocalcin + 1 J98)),
- J100 the <u>a</u> so-called genital androgeny index, J100 being defined by the <u>a</u> relation J100 =  $(J98/J81) \times J99 \times (J97)^2/(J3 + J97)$ ,
- J101 the <u>a</u> so-called comparative genital androgeny index, J101 being defined by the <u>a</u> relation  $J101 = (2 \text{ x (TSH)}^2 \text{ x CPK})/(J4 \text{ x osteocalcin x O1}),$
- J102 the a so-called "starter" index, J102 being the a ratio J14/J15,
- J103 the <u>a</u> so-called adjusted index of thyroid reactivating activity, J103 being the <u>a</u> product J16 x J2,
- J104 the <u>a</u> so-called pro-inflammatory index, J104 being the <u>a</u> product J103 x J69,
- J105 the a so-called index of inflammation, J105 being the a product J104 x J45,
- J106 the <u>a</u> so-called comparative index of inflammation, J106 being defined by the <u>a</u> relation  $J106 = J105/(((ESR_2/2) + ESR_1)/2)/ESR_1$ ,
- J107 the <u>a</u> so-called interleukin 1 index, J107 being defined by the <u>a</u> relation  $J107 = (J16 \times J38)/(J103 \times J37)$ ,
- J108 the <u>a</u> so-called DHEA index, J108 being defined by the <u>a</u> relation  $J108 = (J29 \times J30 \times J47 \times J51 \times J98 \times 1000)/(J49 \times J27 \times J100)$ ,
- J109 the <u>a</u> so-called serotonin index, J109 being defined by the <u>a</u> relation  $J109 = (10 \times J102)/(J54 \times J74)$ ,
- J110 the <u>a</u> so-called adjusted demyelinization index, J110 being the <u>a</u> product J55 x J102,

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- J111 the a so-called expansiveness index #1, J111 being the a ratio J36/J35,
- J112 the a so-called expansiveness index #2, J112 being the a ratio J40/J41,
- J113 the <u>a</u> so-called global expansiveness index, J113 being defined by the <u>a</u> relation J113 =  $(J111 \times J112)/J45$ ,
- J114 the a so-called ACTH index, J114 being the a ratio J108/J26,
- J115 the <u>a</u> so-called PTH index, J115 being defined by the <u>a</u> relation J115 = (calcium x osteocalcin x TSH)/J4,
- J116 the <u>a</u> so-called index of gonadotropic output, J116 being defined by the <u>a</u> relation J116 =  $1/(J1 \times J53)$ ,
- J117 the <u>a</u> so-called index of pelvic congestion, J117 being defined by the <u>a</u> relation J117 =  $(J59/J60) \times (J94/J33)$ ,
- J118 the a so-called index of splanchnic congestion, J118 being the a ratio J117/J14,
- J119 the <u>a</u> so-called growth score index, J119 being defined by the <u>a</u> relation  $J119 = (J6 \times J37)/(J36 \times J38)$ ,
- J120 the <u>a</u> so-called GH growth score index, J120 being defined by the <u>a</u> relation J120 = (J6 x J37)/J36,
- J121 the a so-called TRH/TSH ratio index, J121 being the a ratio J72/J93,
- J122 the a so-called index of thyroid efficiency, J122 being the a ratio J4/J2,
- J123 the a so-called index of relative thyroid efficiency, J123 being the a ratio J122/J81,
- J124 the <u>a</u> so-called index of oxidation, J124 being defined by the <u>a</u> relation  $J124 = (100 \times J36 \times J54 \times J122)/(J74 \times J26)$ ,
- J125 the a so-called index of reduction, J125 being the a ratio J124/J67,
- J126 the a so-called pro-amyloid index, J126 being the a product J125 x J74,
- J127 the a so-called index of amyloid risk, J127 being the a ratio J8/J124,
- J128 the a so-called index of thyroid output #2, J128 being the a product J2 x J4,
- J129 the a so-called comparative index of thyroid output, J129 being the a ratio J128/J81,
- J130 the a so-called index of estrogenic fraction #3, J130 being the a ratio 1/J1,
- J131 the <u>a</u> so-called index of estrogenic fraction #4, J131 being the <u>a</u> product J18 x J19,
- J132 the <u>a</u> so-called index of estrogenic fraction #5, J132 being the <u>a</u> product J19 x J130,

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- J133 the <u>a</u> so-called general index of estrogenic fraction, J133 being the <u>a</u> product J18 x J19 x J130.
- J134 the <u>a</u> so-called index of estrogenic fraction #6, J134 being defined by the <u>a</u> relation J134 = 1/(osteocalcin x J2),
- J135 the <u>a</u> so-called index of estrogenic fraction #7, J135 being the <u>a</u> product J18 x J19 x J134,
- J136 the a so-called index of estrogenic fraction #8, J136 being the a ratio J2/osteocalcin,
- J137 the <u>a</u> so-called general quantitative estrogenic index, J137 being the <u>a</u> product (J18 + J19) x (leukocytes/100),
- J138 the <u>a</u> so-called index of specific estrogenic fraction, J138 being the <u>a</u> product J5 x (J98 + 1),
- J139 the <u>a</u> so-called comparative estrogenic index #1, J139 being the <u>a</u> ratio J133/(J5 x 100),
- J140 the <u>a</u> so-called comparative estrogenic index #2, J140 being the <u>a</u> ratio J133/(J99 x 100),
- J141 the <u>a</u> so-called global comparative estrogenic index, J141 being the <u>a</u> ratio J133/(J5 x J99 x 100),
- J142 the <u>a</u> so-called index of somatotropic estrogenic output, J142 being the <u>a</u> ratio J133/J144 (where J144 is defined as indicated below),
- J143 the <u>a</u> so-called index of quantitative organotissular estrogenic output, J143 being the <u>a</u> ratio J137/J144 (where J144 is defined below),
- J144 the a so-called FSH index #1, J144 being the a ratio J114/J3,
- J145 the a so-called LH index #1, J145 being the a product J114 x J27,
- J146 the a so-called FSH index #2, J146 being the a ratio J145/J1,
- J147 the a so-called LH index #2, J147 being the a product J144 x J1,
- J148 the a so-called index of progesterone output, J148 being the a ratio J49/J138,
- J149 the a so-called ketonic index, J149 being the a ratio J102/J54,
- J150 the <u>a</u> so-called index of total subliminal TRH, J150 being the <u>a</u> product TSH x (CA19-9) x J90,
- J151 the <u>a</u> so-called index of active carcinogenesis, J151 being the <u>a</u> product J59 x J113,

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- J152 the <u>a</u> so-called comparative index of active carcinogenesis, J152 being the <u>a</u> product J60 x J113.
- J153 the a so-called gonadothyrotropic index, J153 being the a ratio TSH/J2,
- J154 the <u>a</u> so-called index of global tissular estrogenic fraction, J154 being the <u>a</u> ratio J140/J139,
- J155 the a so-called index of muscle destruction, J155 being the a ratio J36/J101,
- J156 the <u>a</u> so-called amyloid score index, J156 being defined by the <u>a</u> relation J156 = (J2 x J53 x J72 x J94 x J110 x J126 x J127)/(J4 x J5 x J67 x J19 x J20),
- J157 the a so-called adjusted necrosis index, J157 being the a product LDH x J45; and,
- (4°) comparing at least one of the J1-J157 indexes with the corresponding result obtained according to steps (2°) and (3°) with human beings already recognized as being healthy, in order to appreciate dynamically the biological state of the patient to be tested.
- 2. (Original) A method according to claim 1, wherein at least one abnormality is looked for at the level of indexes J1 to J157 of the patient.
- 3. (Currently Amended) A method according to claim 1, wherein (i) at least one index from J1 to J24 and (ii) at least one index from J25 to J157 are looked for in step (3°).
- 4. (Currently Amended) A method according to any one of claims 1-3 claim 1, wherein in step (3°) at least 8, 10 or 15 indexes J are measured.
- 5. (Currently Amended) A method according to claim 1, wherein in step (3°) at least a portion of indexes J1-J157, which constitute the scores of functions involved in the at least one of symptomatology and/or pathology of the patient to be tested, is measured.
- 6. (Original) A method according to claim 5, wherein said scores of functions involved in the symptomatology and/or pathology are selected from the group consisting of the scores of pregnancy, menstruation, cardiovascularity, thrombosis, Alzheimer's disease, atherosclerosis, cancer and sudden death risk.

- 7. (Original) A method according to claim 1, wherein in step (4°) the indexes obtained for a patient to be tested are compared with corresponding median values determined from healthy subjects.
- 8. (Currently Amended) A software product loadable in particular in the <u>an</u> internal memory of a computer, comprises comprising portions of computer code to perform the following steps: (3°) and (4°) of the method as claimed in claim 1
- (3°) measuring, from step (2°), at least one index selected from the group consisting of following indexes J1-J157:
- <u>J1</u> <u>a so-called genital ratio index, which is a ratio red blood cells/leukocytes,</u>
- J2 a so-called genital-thyroid ratio index, which is a ratio neutrophils/lymphocytes,
- <u>J3</u> <u>a so-called adaptation index, which is a ratio eosinophils/monocytes, J3 being such that J3</u> = <u>eosinophils/monocytes</u> = <u>ACTH/FSH</u>,
- <u>J4</u> a so-called thyroid index, which is a ratio LDH/CPK,
- J5 a so-called estrogenic index, which is a ratio TSH/osteocalcin,
- J6 a so-called growth index, which is a ratio bone isoenzymes of the alkaline phosphatases/osteocalcin, (O1/osteocalcin),
- J7 a so-called turnover index, which is a product TSH x O1
- <u>J8</u> a so-called fibrosis index, J8 being defined by a relation  $\underline{J8 = (TSH)^2(\text{osteocalcin})^3/100},$
- <u>J9</u> <u>a so-called index of thyroid involvement, which is a ratio CA15-3/CEA,</u>
- J10 a so-called index of follicular involvement, which is a ratio CA125/CEA,
- J11 a so-called index of metabolic-hypothalamic involvement, which is a ratio CA19-9/CEA,
- <u>J12</u> <u>a so-called pancreatic index, which is a ratio PAP/PSA,</u>
- J13 a so-called global TRH index of adaptation, which is a ratio CA19-9/TSH,
- <u>J14</u> <u>a so-called index of leukocytes mobilization, J14 being defined by a relation J14 = (platelets x neutrophils x HG)/(30 x leukocytes),</u>
- $\underline{J15}$  a so-called index of platelets mobilization,  $\underline{J15}$  being defined by a relation  $\underline{J15}$  = platelets/(60  $\underline{x}$  red blood cells),

<u>J16</u>	a so-called index of thyroid reactivating activity, which is a ratio						
	monocytes/lymphocytes,						
<u>J17</u>	a so-called structure/function ratio index, J17 being defined by a relation J17 =						
	(neutrophils+basophils+monocytes)/(eosinophils [[x]] + lymphocytes),						
<u>J18</u>	a so-called index of estrogenic fraction #1, which is a ratio lymphocytes/osteocalcin,						
<u>J19</u>	a so-called index of estrogenic fraction #2, which is a ratio neutrophils/monocytes,						
<u>J20</u>	a so-called index of metabolic estrogenic fraction, which is a ratio LDH/osteocalcin,						
<u>J21</u>	a so-called index of thyroid mobilization of bone metabolism, which is a ratio LDH/bone						
	isoenzymes fraction of the alkaline phosphatases,						
<u>J22</u>	a so-called index of thyroid mobilization of bone endocrine metabolism, which is a ratio						
	TSH/bone isoenzymes fraction of the alkaline phosphatases,						
<u>J23</u>	a so-called index of relative osteomuscular metabolic activity, which is a ratio CPK/bone						
	isoenzymes fraction of the alkaline phosphatases,						
<u>J24</u>	a so-called index of thyroid bone metabolic activity, which is a ratio CPK/osteocalcin,						
<u>J25</u>	a so-called catabolism/anabolism ratio index, J25 being a ratio J2/J1,						
<u>J26</u>	a so-called index of circulating cortisol, J26 being a ratio J25/J3,						
<u>J27</u>	a so-called androgenic index, J27 being a ratio J1/J3,						
<u>J28</u>	a so-called adrenal cortex index, J28 being a ratio J26/J27,						
<u>J29</u>	a so-called index of adrenal cortex permissiveness, J29 being a ratio <del>J1/J27</del> 1/J27,						
<u>J30</u>	a so-called index of aromatization of estrogens, J30 being a ratio J29/J1,						
<u>J31</u>	a so-called level of catabolism, J31 being a ratio J4/J28,						
<u>J32</u>	a so-called level of anabolism, J32 being a ratio J31/J25,						
<u>J33</u>	a so-called level of metabolic activity efficiency, J33 being defined by a relation J33 =						
	$(J32+J31) \times 100/2.25$						
<u>J34</u>	a so-called index of bone remodeling, which is a product TSH x J6,						
<u>J35</u>	a so-called index of nuclear membrane activity, J35 being a ratio J5/J6,						
<u>J36</u>	a so-called adjusted growth index, J36 being a ratio J6/J7,						

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 $J39 = (J38/J6) \times TSH$ 

<u>J37</u>

<u>J38</u> <u>J39</u> a so-called anti-growth index, J37 being a ratio 1/J36,

a so-called somatostatin index, J38 being a ratio J37/J26,

a so-called prolactin index, J39 being defined by a relation

<u>J40</u>	a so-called level of membrane expansion, J40 being a product
	J31 x J36,

- J41 a so-called level of structural expansion, J41 being a product J32 x J35,
- J42 a so-called apoptosis index, J42 being a ratio J41/J40,
- J43 a so-called adjusted apoptosis index, J43 being a ratio J42/J35,
- J44 a so-called level of membrane fracture, J44 being defined by a relation J44 = J33/(TSH x J7),
- J45 a so-called necrosis index, J45 being a ratio J44/J42,
- J46 a so-called level of activity of total androgens, J46 being a product
  J5 x J1
- $\underline{\text{J47}}$  a so-called rate of adrenal cortex androgens,  $\underline{\text{J47}}$  being defined by a relation  $\underline{\text{J47}} = \underline{\text{J46}/(1} + \underline{\text{J27}})$ ,
- <u>J48</u> a so-called rate of genital androgens, <u>J48</u> being defined by a relation <u>J48</u> = (<u>J46</u> <u>J47</u>),
- $\frac{\text{J49}}{\text{J49}}$  a so-called progesterone index, J49 being defined by a relation  $\frac{\text{J49}}{\text{J49}} = \frac{\text{J5}}{\text{J48} \times \text{J3}}$ ,
- $\underline{J50}$  a so-called level of activity of genital estrogens, J50 being defined by a relation J50 =  $\underline{J5/(1 + J30)}$ ,
- J51 a so-called rate of aromatized estrogens, J51 being defined by a relation J51 = J5 J50,
- J52 the a so-called adrenal cortex index, which is the a ratio J25/J1,
- $\frac{J53}{a \text{ so-called folliculin index, } J53 \text{ being defined by a relation}}{J53 = 20 \text{ x (}J5/J49\text{),}}$
- $\frac{\text{J54}}{\text{J54}}$  a so-called insulin index, J54 being defined by a relation  $\frac{\text{J54}}{\text{J54}} = \frac{(100 \text{ x J25})}{(17 \text{ x TSH})}$
- <u>J55</u> a so-called demyelinization index, J55 being defined by a relation J55 =  $J54/(J36 \times J6)$ ,
- J56 a so-called index of DNA fracture, J56 being defined by a relation  $J56 = (100 \times J5 \times J6 \times J41)/(J7 \times J35 \times J42 \times J45),$
- <u>J57</u> <u>a so-called index of nucleocytoplasmic pathogenicity, J57 being defined by a relation J57</u> = (1.7 x J56)/J44,
- J58 a so-called index of cellular fracture, J58 being defined by a relation J58 = 2.5 x J44 x J56/J45,

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- <u>J59</u> a so-called index of carcinogenesis, J59 is a ratio J57/J42,
- <u>J60</u> a so-called index of comparative carcinogenesis, J60 being defined by a relation J60 = (10 x J58)/J43,
- <u>J61</u> a so-called index of active cellular permeability, J61 being defined by a relation J61 = J6
  x J34/J54,
- J62 a so-called index of adjusted active cellular permeability, J62 being defined by a relation  $J62 = (J61 \times J29)/J26,$
- J63 a so-called index of passive cellular permeability, J63 being defined by a relation J63 = J45 x J35 x J68 x 10 (wherein J68 is defined as indicated below),
- J64 a so-called index of active intracellular osmolar gradient, J64 being defined by a relation

  J64 = 100 x J54 x J40 x J35/J3,
- <u>J65</u> a so-called index of adjusted active intracellular osmolar gradient, J65 being defined by a relation J65 = (J64 x J29)/J26,
- J66 a so-called index of passive intracellular osmolar gradient, J66 being defined by a relation  $J66 = (10 \times J43 \times J53)/(J45 \times J8)$
- J67 a so-called oxidation-reduction index, J67 being defined by a relation J67 =  $(100 \times J45 \times J40 \times J41 \times J54)/(J71 \times J8 \times J38)$ , (wherein J71 is defined as indicated below),
- J68 a so-called index of corticoadrenal adaptation/permissiveness, J68 being defined by a relation J68 = J26 J29 J28,
- J69 a so-called adaptogenic index which is a ratio K/Ca,
- J70 a so-called bMSH/aMSH index, (differential melanocyte-stimulating hormones), J70 being a ratio J4/J69,

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<u>J71</u>	a so-called apoptosis bis index, J71 being defined by a relation
	$J71 = J35/(J36 \times J25)$ ,

- J72 a so-called amylosis index, J72 being defined by a relation  $J72 = (J38 \times J53 \times J55 \times TSH)/(J4 \times J5 \times J54)$ ,
- <u>J73</u> <u>a so-called index of amylosis risk, J73 being a ratio J8/J67,</u>
- <u>J74</u> a so-called index of insulin resistance, J74 being a ratio J38/J54,
- J75 a so-called upstream index #1, J75 being a ratio J4/J9,
- J76 a so-called upstream index #2, J76 being a ratio J4/J10,
- <u>J77</u> <u>a so-called upstream index #3, J77 being a ratio J4/J11,</u>
- J78 a so-called global upstream index #1, J78 being a ratio J75/J76,
- J79 a so-called global upstream index #2, J79 being a ratio J75/J77,
- J80 a so-called global upstream index #3, J80 being a ratio J76/J77,
- J81 a so-called index of thyroid output #1, J81 being a ratio J4/TSH,
- J82 a so-called index of free radicals, J82 being a ratio J67/J54,
- <u>J83</u> a so-called adjusted index of free radicals, J83 being defined by a relation J83 = (J67 + J64)/(J54 + J74),
- J84 a so-called comparative index of free radicals, J84 being defined by a relation J84 = (J67  $+ (100 \times J40))/(J54 + J74)$ ,
- <u>J85</u> a so-called index of free radical nocivity, J85 being defined by a relation J85 =  $((J82 + J84) \times J56)/(3 \times J71)$ ,
- <u>J86</u> a so-called adjusted apoptosis index (B), J86 being a ratio J71/J35,
- J87 a so-called index of active histamine, J87 being defined by a relation J87 = (eosinophils x platelets x J3)/J52,
- J88 a so-called index of potential histamine, J88 being defined by a relation J88 = (J87 x J63)/(potassium x J70)
- J89 a so-called TRH index, which is a ratio TSH/FT4,
- J90 a so-called index of relative intrathyroid TRH activity, which is a ratio FT3/FT4,
- <u>J91</u> <u>a so-called index of carcinogenic expansion, J91 being a ratio J60/J59,</u>

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<u> 192</u>	a so-called index of cancer potential, J92 being product
	J91 x J54 x J85,

- J93 a so-called adenosis index, J93 being a ratio J8/J91,
- J94 a so-called ischemia reperfusion index, J94 being defined by a relation J94 = 10 x J34 x J43/J33,
- J95 a so-called thrombogenic index, J95 being defined by a relation
  J95 = 10 x J34 x J42 x J45/J33,
- $\underline{J96}$  a so-called thrombotic index, J96 being defined by a relation  $\underline{J96} = \underline{J95} \times \underline{J87} \times \underline{J1/10}$ ,
- <u>J97</u> <u>a so-called adjusted genital ratio index, J97 being defined by a relation J97 = (J14 x Red cells)/(Leukocytes x J15) = J14 x J1/J15,</u>
- J98 a so-called musculotropic index, J98 being defined by a relation  $J98 = J97 \times (CPK/O1),$
- J99 <u>a so-called adjusted estrogenic index, J99 being defined by a relation J99 = (J5 x (osteocalcin + 1)/(osteocalcin + 1 J98)),</u>
- J100 a so-called genital androgeny index, J100 being defined by a relation J100 = (J98/J81) x J99 x (J97) $^2$ /(J3 + J97),
- J101 a so-called comparative genital androgeny index, J101 being defined by a relation J101 =  $(2 \times (TSH)^2 \times CPK)/(J4 \times osteocalcin \times O1)$ ,
- J102 a so-called "starter" index, J102 being a ratio J14/J15,
- J103 a so-called adjusted index of thyroid reactivating activity, J103 being a product J16 x J2,
- J104 a so-called pro-inflammatory index, J104 being a product J103 x J69,
- J105 a so-called index of inflammation, J105 being a product J104 x J45,
- <u>J106</u> a so-called comparative index of inflammation, J106 being defined by a relation J106 =  $\frac{J105}{(((ESR_2/2) + ESR_1)/2)/ESR_1}$
- J107 a so-called interleukin 1 index, J107 being defined by a relation  $J107 = (J16 \times J38)/(J103 \times J37),$
- J108 a so-called DHEA index, J108 being defined by a relation

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J108 = (	J29 x	J30 x	J47 x	J51:	x J98 x	1000)	)/(	J49 x	; J27	x J100),

- J109 a so-called serotonin index, J109 being defined by a relation  $J109 = \frac{(10 \times J102)}{(J54 \times J74)},$
- J110 a so-called adjusted demyelinization index, J110 being a product

  J55 x J102,
- J111 a so-called expansiveness index #1, J111 being a ratio J36/J35,
- J112 a so-called expansiveness index #2, J112 being a ratio J40/J41,
- J113 a so-called global expansiveness index, J113 being defined by a relation J113 = (J111 x J112)/J45,
- J114 a so-called ACTH index, J114 being a ratio J108/J26,
- J115 a so-called PTH index, J115 being defined by a relation

  J115 = (calcium x osteocalcin x TSH)/J4,
- J116 a so-called index of gonadotropic output, J116 being defined by a relation J116 = 1/(J1 x) J53).
- J117 a so-called index of pelvic congestion, J117 being defined by a relation J117 = (J59/J60)  $\times$  (J94/J33),
- J118 a so-called index of splanchnic congestion, J118 being a ratio J117/J14,
- J119 a so-called growth score index, J119 being defined by a relation

  J119 = (J6 x J37)/(J36 x J38),
- J120 a so-called GH growth score index, J120 being defined by a relation J120 = (J6 x J37)/J36,
- J121 a so-called TRH/TSH ratio index, J121 being a ratio J72/J93,
- J122 a so-called index of thyroid efficiency, J122 being a ratio J4/J2,
- J123 a so-called index of relative thyroid efficiency, J123 being a ratio J122/J81,
- J124 a so-called index of oxidation, J124 being defined by a relation  $J124 = (100 \times J36 \times J54 \times J122)/(J74 \times J26),$
- J125 a so-called index of reduction, J125 being a ratio J124/J67,
- J126 a so-called pro-amyloid index, J126 being a product J125 x J74,

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1127	a so-called index	of amy	loid risk.	J127 be	eing a ratio	J8/J124.
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- J128 a so-called index of thyroid output #2, J128 being a product J2 x J4,
- J129 a so-called comparative index of thyroid output, J129 being a ratio J128/J81,
- J130 a so-called index of estrogenic fraction #3, J130 being a ratio 1/J1,
- J131 a so-called index of estrogenic fraction #4, J131 being a product
  J18 x J19,
- J132 a so-called index of estrogenic fraction #5, J132 being a product
  J19 x J130,
- J133 a so-called general index of estrogenic fraction, J133 being a product J18 x J19 x J130,
- <u>J134</u> a so-called index of estrogenic fraction #6, J134 being defined by a relation J134 = 1/(osteocalcin x J2),
- J135 a so-called index of estrogenic fraction #7, J135 being a product
  J18 x J19 x J134,
- J136 a so-called index of estrogenic fraction #8, J136 being a ratio J2/osteocalcin,
- J137 a so-called general quantitative estrogenic index, J137 being a product (J18 + J19) x (leukocytes/100),
- J138 a so-called index of specific estrogenic fraction, J138 being a product

  J5 x (J98 + 1),
- J139 a so-called comparative estrogenic index #1, J139 being a ratio J133/(J5 x 100),
- J140 a so-called comparative estrogenic index #2, J140 being a ratio J133/(J99 x 100),
- J141 a so-called global comparative estrogenic index, J141 being a ratio J133/(J5 x J99 x 100).
- J142 a so-called index of somatotropic estrogenic output, J142 being a ratio J133/J144 (where J144 is defined as indicated below),
- J143 a so-called index of quantitative organotissular estrogenic output,

  J143 being a ratio J137/J144 (where J144 is defined below),

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- J144 a so-called FSH index #1, J144 being a ratio J114/J3,
- J145 a so-called LH index #1, J145 being a product J114 x J27,
- J146 a so-called FSH index #2, J146 being a ratio J145/J1,
- J147 a so-called LH index #2, J147 being a product J144 x J1,
- J148 a so-called index of progesterone output, J148 being a ratio J49/J138,
- J149 a so-called ketonic index, J149 being a ratio J102/J54,
- J150 a so-called index of total subliminal TRH, J150 being a product

  TSH x (CA19-9) x J90,
- J151 a so-called index of active carcinogenesis, J151 being a product
  J59 x J113,
- J152 a so-called comparative index of active carcinogenesis, J152 being a product J60 x J113,
- J153 a so-called gonadothyrotropic index, J153 being a ratio TSH/J2,
- J154 a so-called index of global tissular estrogenic fraction, J154 being a ratio J140/J139,
- J155 a so-called index of muscle destruction, J155 being a ratio J36/J101,
- J156 a so-called amyloid score index, J156 being defined by a relation J156 = (J2 x J53 x J72 x J94 x J110 x J126 x J127)/(J4 x J5 x J67 x J19 x J20),
- J157 a so-called adjusted necrosis index, J157 being a product LDH x J45; and,
- (4°) comparing at least one of the J1-J157 indexes with the corresponding result obtained according to steps (2°) and (3°) with human beings already recognized as being healthy, in order to appreciate dynamically the biological state of the patient to be tested.
  - 9. (Currently Amended) A software product according to claim 8, comprising
  - [[(F)]] (A) a form field for entering (i) the patient's name or code, (ii) his age, and (iii) his sex, on the one hand, and any known treatment followed by said patient formerly or at the present time, on the other hand;
  - [[(G)]] (B) a form field for entering (iv) one or several hematic parameters measured in vitro from the blood of the patient and (v) the date of the measures;

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- [[(H)]] (C) a field including all the indexes from J1 to J157, (vii) their calculation mode and (viii) their median values determined from human beings who are recognized as healthy subjects;
- [[(I)]] (D) a command for (ix) the calculation of one index J, of several indexes J or the totality of indexes from the hematic parameters of said field (B) obtained from the blood of the patient to be tested, and (x) for the comparison of the obtained value for at least one of said indexes J with its median value of field (C); and,
- [[(J)]] (E) means for classifying, visualizing, editing and/or printing the obtained result by implementing command (D) starting from fields (A), (B), and (C).
- 10. (Original) A software product according to claim 9, wherein each median value of an index J in an interval of normal values previously determined from subjects recognized as being healthy.
- 11. (Currently Amended) A software product according to claim 9 or 10, which comprises an instruction for recognizing and flagging up any abnormality constituted by a value of an index J which stands away from its median value or interval thereof.
- 12. (New) A software product according to claim 9, which comprises an instruction for recognizing and flagging up any abnormality constituted by a value of an index J which stands away from its median value or interval thereof.